

Attributing mortality from extreme temperatures to climate change in Stockholm, Sweden

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Abstract:

A changing climate is increasing the frequency, intensity, duration and spatial extent of heat waves. These changes are associated with increased human mortality during heat extremes. At the other end of the temperature scale, it has been widely speculated that cold-related mortality could decrease in a warmer world. We aim to answer a key question; the extent to which mortality due to temperature extremes in Stockholm, Sweden during 1980-2009 can be attributed to climate change that has occurred since our reference period (1900-1929). Mortality from heat extremes in 1980-2009 was double what would have occurred without climate change. Although temperature shifted towards warmer temperatures in the winter season, cold extremes occurred more frequently, contributing to a small increase of mortality during the winter months. No evidence was found for adaptation over 1980-2009.

Source: http://www.nature.com/nclimate/journal/v3/n12/full/nclimate2022.html

Resource Description

Exposure: M

weather or climate related pathway by which climate change affects health

Temperature

Temperature: Extreme Cold, Extreme Heat

Geographic Feature: M

resource focuses on specific type of geography

Freshwater, Ocean/Coastal, Urban

Geographic Location:

resource focuses on specific location

Non-United States

Non-United States: Europe

European Region/Country: European Country

Other European Country: Sweden

Climate Change and Human Health Literature Portal

Health Impact: M

specification of health effect or disease related to climate change exposure

Morbidity/Mortality

Resource Type:

format or standard characteristic of resource

Research Article

Timescale: M

time period studied

Time Scale Unspecified